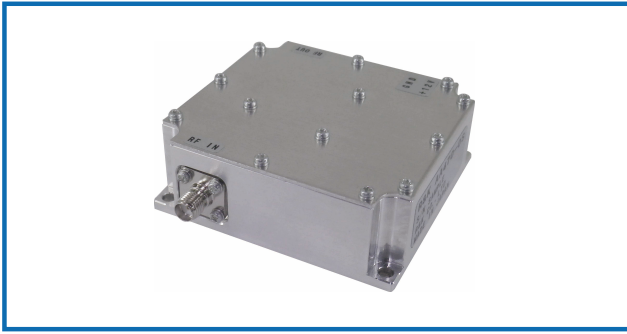


SMALL SIGNAL AMPLIFIER



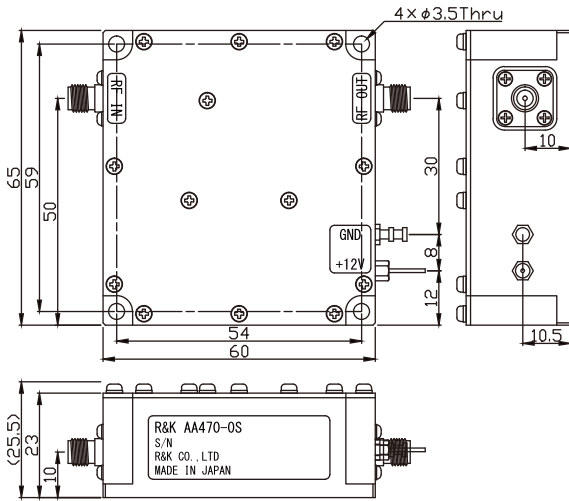
Ver.2.0 : 2022.08.17

R&K-AA470-0S



OUTLINE DRAWING

※IN MILLIMETERS



- Broadband Frequency : 1MHz~6000MHz
- Output Power : +26dBm @3GHz
- Small Signal Gain : +21dB(typ.) @3GHz
- Low Cost
- RoHS Compliance

SPECIFICATIONS

Frequency Range	: 1MHz ~ 6000MHz
Small Signal Gain	: +21dB (typ.) @3GHz : +19dB (min.)
Gain Flatness	: \pm 2dB (max.)
Output Power@1dB Comp	: +26dBm (min.) @3GHz
Output I.C.P	: +40dBm (typ.) @3GHz
Noise Figure	: 12dB (max.)
NOTE: N.F.value is only guaranteed in the range of 200MHz ~ 6000MHz.	
Impedance	: 50 Ω
Input Return Loss	: 13dB (typ.)
Output Return Loss	: 10dB (typ.)
DC Supply Input	: +12V \pm 0.5V : 700mA (max.)
Maximum RF Input Power	: +13dBm
Operating Temperature (@Base Plate Temp.)	: -20°C to +60°C
Storage Temperature	: -20°C to +80°C
Connectors	: SMA-Female
Weight (AA470-0S)	: 155g (typ.)

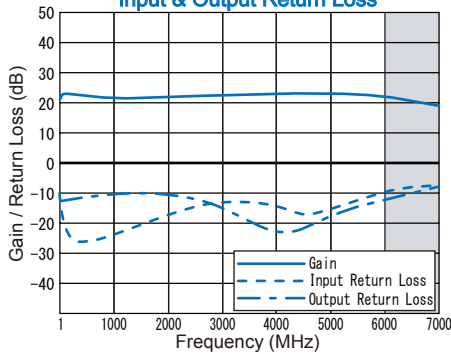
HOW TO ORDER

Model Name
R&K-AA470-0S

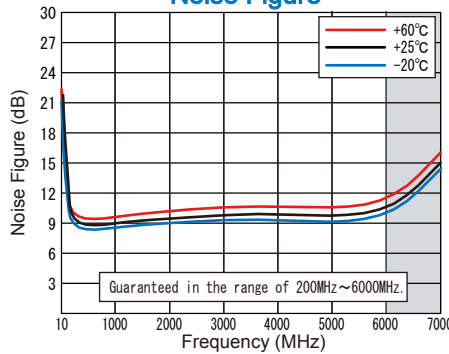
No Option
0 = Module
1 = With Heatsink & Fan

TYPICAL PERFORMANCE (Temp @+25°C)

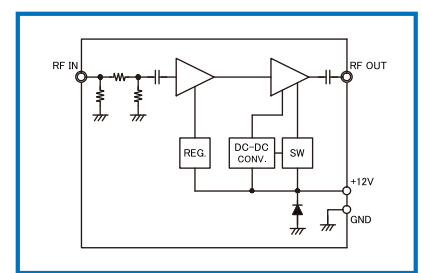
Small Signal Gain & Gain Flatness Input & Output Return Loss



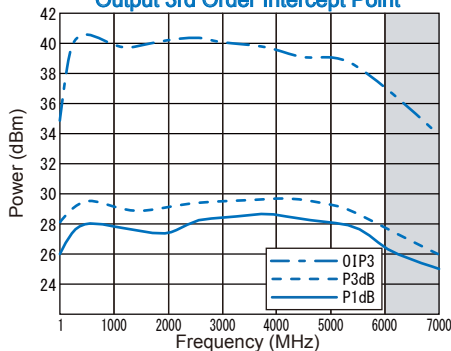
Noise Figure



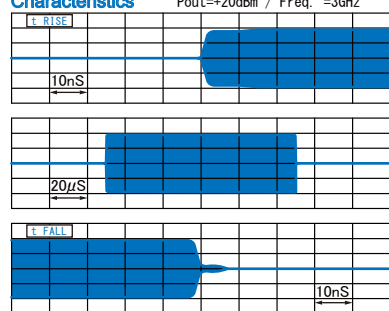
SCHEMATIC



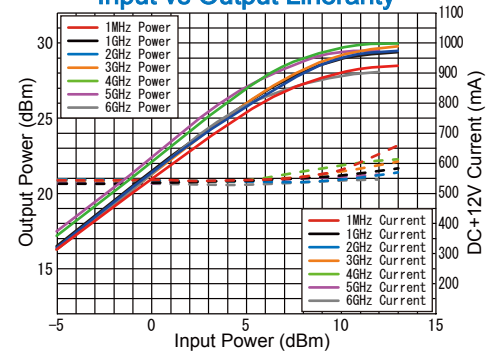
Output Power 1dB & 3dB Comp. Output 3rd Order Intercept Point



Pulse Characteristics



Input vs Output Linerarity



R&K reserves the right to make changes in the specifications of or discontinue products at any time without notice. R&K products shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as aerospace uses or medical life support equipment. Further, the export of R&K products from Japan may be subject to an export license by the government of Japan, based on Japan's "Foreign Exchange and Foreign Trade Law".

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R&K-AA470-0S

Revision history

Date	Version Number	Detailed contents of the change.
2015/09/25	1.0	First edition issued.
2022/08/17	2.0	Outline drawing change. Specifications change. - Output I. C. P : +41dBm (typ.) @3GHz ⇒ +40dBm (typ.) @3GHz - Noise Figure : 10dB (typ.) ⇒ 12dB (max.) - Input VSWR : 1.8 : 1.0 (typ.) ⇒ Input Return Loss : 13dB (typ.) - Output VSWR : 1.8 : 1.0 (typ.) ⇒ Output Return Loss : 10dB (typ.) - DC Supply Input : +12V ±0.2V / 600mA (max.) ⇒ +12V ±0.5V / 700mA (max.) - Maximum RF Input Power : +12dBm ⇒ +13dBm - Weight : 160g (typ.) ⇒ 155g (typ.)

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